

# **ROHS** 465 Series Fuse







#### **Agency Approvals**

	AGENCY	AGENCY FILE NUMBER	AMPERE RANGE
	PS	NBK030205-E108480B	1A - 6.3A
M		E184655A,B	250mA - 6.3A

#### **Electrical Characteristics for Series**

% of Ampere Rating	Opening Time	
125%	1 hour, Minimum	
200%	2 minutes, Maximum	
1000%	0.01 sec., Min.; 0.1 sec., Max.	

#### **Description**

The Surface Mount Nano² 250V UMF product family complies with IEC Publication IEC60127-4-Universal Modular Fuse-Links [UMF]. This IEC standard has been accepted by UL/CSA making it the first global fuse standard.

#### **Features**

- Time-Lag
- Listed to IEC 60127-4, Universal Modular Fuse-Links (UMF), 250V
- 250VAC Voltage rating
- RoHS complaint

## **Applications**

- Power supply
- Lighting system
- · White goods
- Industrial equipment
- Medical equipment

## **Electrical Specifications by Item**

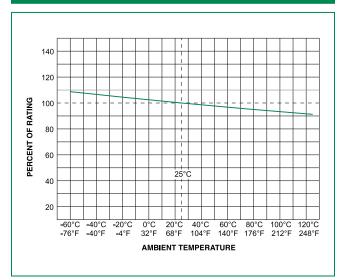
Ampere Rating Amp Code (A)		Max Voltage Rating (V)	Interrupting Rating	Nominal Cold Resistance (Ohms)	Nominal Melting I²t (A²sec)	Agency Approvals	
	Amp Code					PS	M
1.00	001.	250	100 amperes @250VAC	0.1070	2.8	Х	Х
1.25	1.25	250		0.0830	5.6	Х	х
1.60	01.6	250		0.0560	9.2	×	Х
2.00	002.	250		0.0390	14.9	×	х
2.50	02.5	250		0.0260	21.0	Х	Х
3.15	3.15	250		0.0210	31.7	Х	х
4.00	004.	250		0.0160	48.4	Х	х
5.00	005.	250		0.0130	87.0	Х	x
6.30	06.3	250		0.0088	144.4	Х	Х

#### Notes:

- I<sup>2</sup>t calculated at 8ms.
- Resistance is measured at 10% of rated current,  $25^{\circ}\text{C}$
- For information and availability of additional ratings please contact Littelfuse



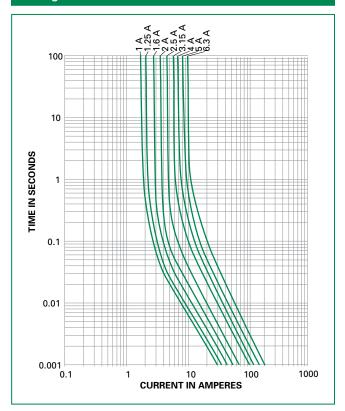
# **Temperature Rerating Curve**



#### Note:

1. Derating depicted in this curve is in addition to the standard derating of 15% for continuous operation.

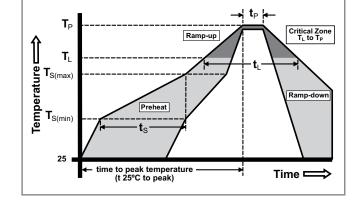
## **Average Time Current Curves**



## **Soldering Parameters**

Wave Soldering Parameters

Reflow Co	ndition	Pb – Free assembly	
	-Temperature Min (T <sub>s(min)</sub> )	150°C	
Pre Heat	-Temperature Max (T <sub>s(max)</sub> )	200°C	
	-Time (Min to Max) (t <sub>s</sub> )	60 – 120 secs	
Average ra	amp up rate (Liquidus Temp k	5°C/second max.	
$T_{S(max)}$ to $T_{L}$	- Ramp-up Rate	5°C/second max.	
Reflow	-Temperature (T <sub>L</sub> ) (Liquidus)	217°C	
hellow	-Temperature (t <sub>L</sub> )	60 - 90 seconds	
PeakTemp	erature (T <sub>P</sub> )	250 <sup>+0/-5</sup> °C	
Time with	in 5°C of actual peak ıre (t <sub>p</sub> )	20 - 40 seconds	
Ramp-dov	vn Rate	5°C/second max.	
Time 25°C	to peakTemperature (T <sub>P</sub> )	8 minutes max.	
Do not exceed		260°C	
		260°C Peak	



Temperature, 3 seconds max.

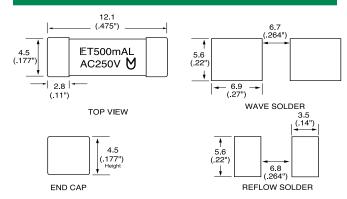


## **Product Characteristics**

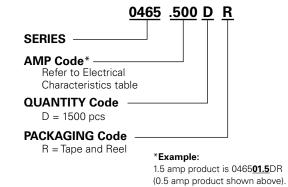
Materials	Body: High Performance Ceramic Terminations: Silver plated brass.	
Product Marketing	Brand, Ampere Rating, Voltage Rating, UMF Logo	
Operating Temperature	−55°C to 125°C.	
Moisture Sensitivity Level	Level 1, J-STD-020C	
Solderability	IEC60127-4	
Insulation Resistance (after opening	IEC 60127-4 (0.1Mohm min @ 500VDC)	
Shock	MIL-STD-202, Method 213, Test Condition A	

Thermal Shock	MIL-STD-202, Method 107, Test Condition B , 5 cycles, –65°C to 125°C
Mechanical Shock	MIL-STD-202, Method 213, Test Condition A
Vibration	MIL-STD-202, Method 201 (10-55 Hz)
Moisture Resistance	MIL-STD-202, Method 106, 10 cycles
Salt Spray	MIL-STD-202, Method 101, Test Condition B (48hrs)
Resistance to Soldering Heat	IEC 60127-4

# **Dimensions**



# **Part Numbering System**



## **Packaging**

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code
24mm Tape and Reel	EIA RS-481-1 (IEC 286, part 3)	1500	DR